

# The Pump Handle



"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

## December 2004 Topics

- Influenza Update
- Hepatitis C Public Health Needs Assessment
- Holiday Season Foodborne Outbreaks
- Syphilis Treatment Warning



### **Influenza Update**

Seventy-two cases of influenza have been reported to the North Dakota Department of Health (NDDoH) through the end of December 2004. Last year influenza cases peaked in mid-December at nearly 300 cases per week and ended in late February with a total of 1,663 cases. The following is a summary of reported influenza cases as of 01/01/2005:

Age Group (Years)	Number of cases reported (YTD)
< 1	2
1 – 5	6
6 – 10	9
11 – 19	13
20 – 24	2
25 – 34	5
35 – 44	5
45 – 54	12
55 – 64	6
65 +	12

<b>Type of Influenza</b>	<b>Number of cases reported (YTD)</b>
Influenza A, H1N1	0
Influenza A, H3N2	10
Influenza A, unspecified	43
Influenza B	2
Influenza, unknown type	17
Total	72

The NDDoH recently purchased an additional 2,000 doses of influenza vaccine for distribution through local public health units. Another 5,700 doses are available for North Dakota in December and January. With the vaccine recently purchased, it is anticipated that all areas of the state should now have adequate supplies of vaccine to vaccinate people in these priority groups (in no specific order):

- Children age 6 to 23 months
- Adults age 65 and older
- People age 2 to 64 who have chronic medical conditions, such as heart disease or asthma
- Women who will be pregnant during influenza season
- Residents of nursing homes and long-term care facilities
- Children age 6 months to 18 years who are on chronic aspirin therapy
- Health-care workers who provide direct patient care
- Out-of-home caregivers and household contacts of children younger than 6 months

Two additional priority groups have been added to the influenza recommendations since the receipt of additional vaccine in North Dakota. They are:

- **Children and adolescents age 2 through 18 who are household contacts of people in high-risk groups**
- **Adults age 50 to 64 and close contacts of people in high-risk groups**

It is especially important that all children younger than 9 who have not previously been vaccinated for influenza receive two doses separated by one month. The NDDoH Immunization Program has adequate supplies of childhood influenza vaccine for all children to receive two doses. Providers may order childhood influenza vaccine by calling 701.328.3386 or toll-free at 800.472.2180.

Information regarding influenza is available at the North Dakota Department of Health influenza website at [www.ndflu.com](http://www.ndflu.com). National, state and county influenza activity is updated every Wednesday during the influenza season. Other topics on this website include historical influenza data, surveillance program information, vaccine information, educational materials and fact sheets, news releases and links to other influenza sites.



### **Hepatitis C Public Health Needs Assessment**

Hepatitis C virus (HCV) infection is the most common, long-term, bloodborne viral infection in the United States. Nearly four million Americans (about 12,000 North Dakotans) are infected with HCV, of whom approximately 2.7 million (8,400 North Dakotans) are infected for life. Many of these people are not aware of their infection and have no symptoms of HCV infection. However, the virus may cause serious liver damage that may not be recognized for 10 to 20 years. HCV-associated liver disease is the most common reason for liver transplant.

Hepatitis C infection is a mandated reportable condition in North Dakota. Since 1991, about 2,550 individuals who have tested positive for HCV (based on at least one positive lab report) have been reported to the North Dakota Department of Health (NDDoH). This means that many North Dakotans may not yet know they are infected. With funding from the Centers for Disease Control and Prevention, efforts are underway to develop prevention and control activities to both reduce incidence of new HCV infections (primary prevention) and to identify individuals already infected (secondary prevention), thus reducing the risk of chronic liver disease through appropriate medical care and counseling.

In an effort to achieve these goals, NDDoH recently distributed two viral hepatitis surveys — one to about 630 North Dakota medical providers and one to about 130 North Dakota residents recently identified as having a positive hepatitis C lab report. The information collected from the surveys will help assess current hepatitis C-related practices, evaluate the current system of reporting the disease, understand needs in the community, develop future hepatitis services and determine direction for future funding. This spring, NDDoH hopes to provide a summary of the findings from the surveys.

For further information about the NDDoH hepatitis C program and the public health needs assessment, contact Kim Weis at 800.472.2180 or [kweis@state.nd.us](mailto:kweis@state.nd.us).



### **Holiday Season Foodborne Outbreaks**

This holiday season, two foodborne outbreaks were reported to the Division of Disease Control of the North Dakota Department of Health. The first was reported on Nov. 29<sup>th</sup>. On the evening of Nov. 27, 2004, 30 people attended an anniversary party hosted by a local hotel restaurant where a buffet meal was served. The party guests traveled from three counties in North Dakota and from Minnesota, Montana and Wisconsin. Thirteen restaurant employees also ate from the same buffet as the party goers. Three employees and 12 party guests reported diarrhea and/or vomiting after eating from the buffet served at the anniversary party and one guest was hospitalized. Two food samples and two stool specimens sent in for testing at the Division of Microbiology were negative for bacterial pathogens. Norovirus results are pending, although the relatively short incubation period makes norovirus an unlikely cause for the outbreak. The median incubation period was 5.5 hours which is more indicative of a bacterial intoxication than viral gastroenteritis. Statistical analysis of menu items showed that no significant food item was epidemiologically linked to the outbreak.

The second outbreak was reported to Disease Control on Dec. 2, 2004. Eleven of 30 individuals fell ill after attending their company Christmas party. The majority of party

attendees reported having diarrhea and/or vomiting approximately 32 hours after eating at the holiday party served at a local restaurant on Nov. 29, 2004. Food and stool samples were unavailable for testing and the causative agent of this outbreak remains unknown.

Although laboratory testing is not required to confirm a foodborne outbreak, it is extremely helpful in the course of the epidemiological investigation. It is important that samples of stool and/or vomitus, along with possible food items, are collected and available for testing to determine the causative agent. Health-care workers should be aware of the signs and symptoms typical of the many agents that cause foodborne illness, as they could be the first to learn about the commonalities of symptoms among patients seeking treatment. If a foodborne outbreak (two or more people ill with similar symptoms after consuming a common food) is suspected, it is important that the provider notify the state health department or local public health unit as soon as possible so that exposed individuals can be identified rapidly, as well as the source and the cause of the illness.

An excellent resource, "Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians," is available at [www.cdc.gov/mmwr/PDF/RR/RR5002.pdf](http://www.cdc.gov/mmwr/PDF/RR/RR5002.pdf). Additional information regarding foodborne illnesses can be found at [www.cdc.gov/ncidod/diseases/food/index.htm](http://www.cdc.gov/ncidod/diseases/food/index.htm).



#### **Syphilis Treatment Warning**

Penicillin G benzathine or Bicillin<sup>®</sup> L-A is the recommended treatment of syphilis according to the Centers for Disease Control and Prevention [2002 Sexually Transmitted Diseases Treatment Guidelines](#). Reports of inappropriate treatment of syphilis from multiple STD clinics in the U.S. using a drug manufactured by the same pharmaceutical company (Bicillin<sup>®</sup> C-R) has resulted in inadequate treatment of syphilis. One instance recently occurred in North Dakota.

In an effort to prevent further instances of inadequate treatment of syphilis, the pharmaceutical company that manufactures both Bicillin<sup>®</sup> C-R and Bicillin<sup>®</sup> L-A has changed the carton and syringe labels to provide greater distinction between the two drugs, including the use of different colors and the addition of a warning sign that states "NOT FOR THE TREATMENT OF SYPHILIS" on the C-R product.

Morbidity of syphilis in North Dakota is low; only two cases were reported in 2003 and none have been reported to date this year. However, it is important that health-care providers recognize the signs and symptoms of syphilis and utilize the appropriate therapy when treating syphilis infections.

*Contributing authors of The Pump Handle include Melissa Casteel, Kim Weis, Julie Goplin, Tracy Miller, Kirby Kruger and Larry Shireley. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Julie Goplin of the Division of Disease Control at 701.238.2375 or by email at [jgoplin@state.nd.us](mailto:jgoplin@state.nd.us).*

*The pump handle picture in the title was obtained from the website [www.ph.ucla.edu/epi/snow.html](http://www.ph.ucla.edu/epi/snow.html).*



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